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FIGURE 1 (1)

ATGGGCGCACTGGCCGGGCGCTGCTGCTGCTGCTGCGCCCAGTGGCTCCTGCGCGCC M G A L A R A L L P L L A Q W L L R A CCCCGGAGCTGGCCCCGCGCCCTTCACGCTGCCCCTCCGGGTGGCCGCGCCACGAAC A P E L A P A P F T L P L R V A A A T N CGCGTAGTTGCGCCCACCCCGGGACCCGGGACCCCTGCCGAGGCGCCACGCCGACGGCTTG RVVAPTPGPGTPAERHADGL GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGCGGCCGCCCAACTTCTTGGCCATG A L'A L E P A L A S P A G A A N F L A M GTAGACAACCTGCAGGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC V D N L Q G D S G R G Y Y L E M L I G T CCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACTTTGCCGTGGCAGGA P P O K L O I L V D T G S S N F A V A G ACCCCGCACTCCTACATAGACACGTACTTTGACACAGAGAGGTCTAGCACATACCGCTCC T P H S Y I D T Y F D T E R S S T Y R S AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGGAA K G F D V T V K Y T O G S W T G F V G E GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGTCAACATTGCCACTATT D L V T I P K G F N T S F L V N I A T I TTTGAATCAGAGAATTTCTTTTTGCCTGGGATTAAATGGAATGGAATACTTGGCCTAGCT FESENFFLPGIKWNGILGLA TATGCCACACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA Y A T L A K P S S S L E T F F D S L V T CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT Q A N I P N V F S M O M C G A G L P V A GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA G S G T N G G S L V L G G I E P S L Y K GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATTCTGAAA G D I W Y T P I K E E W Y Y O I E I L K TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC LEIGGQSLNLDCREYNADKA ATCGTGGACAGTGGCACCACGCTGCTGCCCCAGAAGGTGTTTGATGCGGTGGTG IVDSGTTLLRLPQKVFDAVV GAAGCTGTGGCCCGCGCATCTCTGATTCCAGAATTCTCTGATGGTTTCTGGACTGGGTCC EAVARASLIPEFSDGFWTGS CAGCTGGCGTGCTGGACGAATTCGGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC Q L A C W T N S E T P W S Y F P K I S I TACCTGAGAGATGAGAACTCCAGCAGGTCATTCCGTATCACAATCCTGCCTCAGCTTTAC Y L R D E N S S R S F R (I,)T I L P Q L Y ATTCAGCCCATGATGGGGGCCGGCCTGAATTATGAATGTTACCGATTCGGCATTTCCCCA IQPMMGAGLNYECYRFGISP

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AGAGCCCAGAAGAGGGTGGGCTTCGCAGCGAGCCCCTGTGCAGAAATTGCAGGTGCTGCA

FIGURE 1 (2)

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FIGURE 2 (1)

ATGGCCCAAGCCCTGCCTGGCTCCTGCTGTGGATGGGCGCGGGAGTGCTGCCCAC M A O A L P W L L L W M G A G V L P A H GGCACCCAGCACGGCATCCGGCTGCCCCTGCGCAGCGGCCTGGGGGGGCGCCCCCCTGGGG G T O H G I R L P L R S G L G G A P L G LRLPRETDEEPEPGRRGSF GTGGAGATGGTGGACAACCTGAGGGGCAAGTCGGGGCAGGGCTACTACGTGGAGATGACC V E M V D N L R G K S G O G Y Y V E M T GTGGGCAGCCCCCGCAGACGCTCAACATCCTGGTGGATACAGGCAGCAGTAACTTTGCA V G S P P Q T L N I L V D T G S S GTGGGTGCTGCCCCCACCCCTTCCTGCATCGCTACTACCAGAGGCAGCTGTCCAGCACA V G A A P H P F L H R Y Y O R O L S S TACCGGGACCTCCGGAAGGGTGTGTATGTGCCCTACACCCAGGGCAAGTGGGAAGGGGAG YRDLRKGVYVPYTQGKWEGE LGTDLVSIPHGPNVTVRANI GCTGCCATCACTGAATCAGACAAGTTCTTCATCAACGGCTCCAACTGGGAAGGCATCCTG AAITESDKFFINGSNWEGIL GGGCTGGCCTATGCTGAGATTGCCAGGCTTTGTGGTGCTGGCTTCCCCCTCAACCAGTCT G L A Y A E I A R L C G A G F P L N O S GAAGTGCTGGCCTCTGTCGGAGGGAGCATGATCATTGGAGGTATCGACCACTCGCTGTAC EVLASVGGSMIIGGIDHSLY ACAGGCAGTCTCTGGTATACACCCATCCGGCGGGAGTGGTATTATGAGGTGATCATTGTG TGSLWYTPIRREWYYEVII CGGGTGGAGATCAATGGACAGGATCTGAAAATGGACTGCAAGGAGTACAACTATGACAAG RVEINGQDLKMDCKEYNYDK AGCATTGTGGACAGTGGCACCACCAACCTTCGTTTGCCCAAGAAAGTGTTTGAAGCTGCA SIVDSGTTNLRLPKKVFEAA GTCAAATCCATCAAGGCAGCCTCCTCCACGGAGAAGTTCCCTGATGGTTTCTGGCTAGGA V K S I K A A S S T E K F P D G F W L G GAGCAGCTGGTGTGCCAGCCAGCCACCCCTTGGAACATTTTCCCAGTCATCTCA EQLVCWQAGTTPWNIFPVIS CTCTACCTAATGGGTGAGGTTACCAACCAGTCCTTCCGCATCACCATCCTTCCGCAGCAA LYLMGEVTNQSFRITILPQO TACCTGCGGCCAGTGGAAGATGTGGCCACGTCCCAAGACGACTGTTACAAGTTTGCCATC

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FIGURE 2 (2)

LRPVE D V A T SQDD CYK TCACAGTCATCCACGGGCACTGTTATGGGAGCTGTTATCATGGAGGGCTTCTACGTTGTC TGTVMGAV I M E G Q S S TTTGATCGGGCCCGAAAACGAATTGGCTTTGCTGTCAGCGCTTGCCATGTGCACGATGAG I G F A V S A C H V H D D'R ARKR TTCAGGACGGCAGCGGTGGAAGGCCCTTTTGTCACCTTGGACATGGAAGACTGTGGCTAC RTAAVEGPFVTLDMEDCGY AACATTCCACAGACAGATGAGTCAACCCTCATGACCATAGCCTATGTCATGGCTGCCATC NIPOTDESTLMTIAYVMAAI TGCGCCCTCTTCATGCTGCCACTCTGCCTCATGGTGTCAGTGGCGCTGCCTCCGCTGC A L F M L P L C L M V C Q W R C L R C CTGCGCCAGCAGCATGACTTTGCTGATGACATCTCCCTGCTGAAGTGAGGAGGCCCA RQQHDDFADDISL

FIGURE 3 (1)

M A Q A L P W L L L W M G A G V L P A H GGCACCCAGCACGGCATCCGGCTGCCCCTGCGCAGCGCCTGGGGGGCGCCCCCCTGGGG G T Q H G I R L P L R S G L G G A P L G CTGCGGCTGCCCCGGGAGACCGACGAAGAGCCCGAGGAGCCCGGCCGGAGGGCCAGCTTT LRLPRETDEEPEEPGRRGSF GTGGAGATGGTGGACAACCTGAGGGGCAAGTCGGGGCAGGGCTACTACGTGGAGATGACC V E M V D N L R G K S G O G Y Y V E M T GTGGGCAGCCCCCGCAGACGCTCAACATCCTGGTGGATACAGGCAGCAGTAACTTTGCA V G S P P Q T L N I L V D T G S S N F A GTGGGTGCTGCCCCCACCCCTTCCTGCATCGCTACTACCAGAGGCAGCTGTCCAGCACA V G A A P H P F L H R Y Y Q R Q L S S T TACCGGGACCTCCGGAAGGGTGTGTATGTGCCCTACACCCAGGGCAAGTGGGAAGGGGAG YRDLRKGVYVPYTQGKWEGE LGTDLVSIPHGPNVTVRANI GCTGCCATCACTGAATCAGACAAGTTCTTCATCAACGGCTCCAACTGGGAAGGCATCCTG AAITESDKFFINGSNWEGIL G L A Y A E I A R P D D S L E P F F D S CTGGTAAAGCAGACCCACGTTCCCAACCTCTTCTCCCTGCAGCTTTGTGGTGCTGGCTTC LVKQTHVPNLFSLOLCGAGF PLNQSEVLASVGGSMIIGGI GACCACTCGCTGTACACAGGCAGTCTCTGGTATACACCCATCCGGCGGGAGTGGTATTAT DHSLYTGSLWYTPIRREWYY GAGGTCATCATTGTGCGGGTGGAGATCAATGGACAGGATCTGAAAATGGACTGCAAGGAG VIIVRVEINGQDLKMDCKE TACAACTATGACAAGAGCATTGTGGACAGTGGCACCACCAACCTTCGTTTGCCCAAGAAA YNYDKSIVDSGTTNLRL GTGTTTGAAGCTGCAGTCAAATCCATCAAGGCAGCCTCCTCCACGGAGAAGTTCCCTGAT V F E A A V K S I K A A S S T E K F P D

FIGURE 3 (2)

GGTTTCTGGCTAGGAGGCAGCTGGTGTGCTGGCAAGCAGCACCACCCCTTGGAACATT G F W L G E Q L V C W O A G Т F P V I S L Y L M G E V T N O S F R ATCCTTCCGCAGCAATACCTGCGGCCAGTGGAAGATGTGGCCACGTCCCAAGACGACTGT I L P O O Y L R P V E D V A T S O D D C TACAAGTTTGCCATCTCACAGTCATCCACGGGCACTGTTATGGGAGCTGTTATCATGGAG K F A I S O S S T G T V M G A V I GGCTTCTACGTTGTCTTTGATCGGGCCCGAAAACGAATTGGCTTTGCTGTCAGCGCTTGC G F Y V V F D R A R K R I G F A V S CATGTGCACGATGAGTTCAGGACGGCAGCGGTGGAAGGCCCTTTTGTCACCTTGGACATG HVHDEFR TAAVEGPFVT GAAGACTGTGGCTACAACATTCCACAGACAGATGAGTCAACCCTCATGACCATAGCCTAT DCGYNIPQT DESTLM T GTCATGGCTGCCATCTGCGCCCTCTTCATGCTGCCACTCTGCCTCATGGTGTCAGTGG V M A A I C A L F M L P L C L M V C Q W CGCTGCCTCCGCTGCCCCAGCAGCATGATGACTTTGCTGATGACATCTCCCTGCTG RCLRCLRQQHDDFADD ISLL AAGTGAGGAGGCCCATGGGCAGAAGATAGAGATTCCCCTGGACCACACCTCCGTGGTTCA

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ATGGCCCCAGCGCTGCACTGGCTCCTGCTATGGGTGGGCTCGGGAATGCTGCCCAG M A P A L H W L L L W V G S G M L P A O GGAACCCATCTCGGCATCCGGCTGCCCCTTCGCAGCGCCTGGCAGGGCCACCCCTGGGC G T H L G I R L P L R S G L A G P P L G CTGAGGCTGCCCGGGAGACTGACGAGGAATCGGAGGAGCCTGGCCGGAGAGGCAGCTTT LRLPRETDEESEPGRRGSF GTGGAGATGGTGGACAACCTGAGGGGAAAGTCCGGCCAGGGCTACTATGTGGAGATGACC V E M V D N L R G K S G Q G Y Y V E M T GTAGGCAGCCCCCACAGACGCTCAACATCCTGGTGGACACGGGCAGTAGTAACTTTGCA V G S P P Q T L N I L V D T G S S N F A GTGGGGGCTGCCCCACACCCTTTCCTGCATCGCTACTACCAGAGGCAGCTGTCCAGCACA V G A A P H P F L H R Y Y Q R Q L S S T TATCGAGACCTCCGAAAGGGTGTGTATGTGCCCTACACCCAGGGCAAGTGGGAGGGGGAA YRDLRKGVYVPYTQGKWEGE LGTDLVSIPHGPNVTVRANI GCTGCCATCACTGAATCGGACAAGTTCTTCATCAATGGTTCCAACTGGGAGGGCATCCTA AAITESDKFFINGSNWEGIL GGGCTGGCCTATGCTGAGATTGCCAGGCCCGACGACTCTTTGGAGCCCTTCTTTGACTCC G L A Y A E I A R P D D S L E P F F D S CTGGTGAAGCAGACCCACATTCCCAACATCTTTTCCCTGCAGCTCTGTGGCGCTTGC LVKQTHIPNIFSLQLCGAGF PLNQTEALASVGGSMIIGGI GACCACTCGCTATACACGGGCAGTCTCTGGTACACACCCATCCGGCGGGAGTGGTATTAT DHSLYTGSLWYTPIRREWYY GAAGTGATCATTGTACGTGTGGAAATCAATGGTCAAGATCTCAAGATGGACTGCAAGGAG E V I I V R V E I N G Q D L K M D C K E TACAACTACGACAAGAGCATTGTGGACAGTGGGACCACCAACCTTCGCTTGCCCAAGAAA YNYDKSIVDSGTTNLRLPKK GTATTTGAAGCTGCCGTCAAGTCCATCAAGGCAGCCTCCTCGACGGAGAAGTTCCCGGAT V F E A A V K S I K A A S S T E K F P D GGCTTTTGGCTAGGGGAGCAGCTGGTGTGCTGGCAAGCAGGCACGACCCCTTGGAACATT G F W L G E Q L V C W Q A G T T P W N I TTCCCAGTCATTTCACTTTACCTCATGGGTGAAGTCACCAATCAGTCCTTCCGCATCACC PVISLYLMGEVTNQSFRIT ATCCTTCCTCAGCAATACCTACGGCCGGTGGAGGACGTGGCCACGTCCCAAGACGACTGT ILPQQYLRPVEDVATSQDDC TACAAGTTCGCTGTCTCACAGTCATCCACGGGCACTGTTATGGGAGCCGTCATCATGGAA YKFAVSQSSTGTVMGAVIME GGTTTCTATGTCGTCTTCGATCGAGCCCGAAAGCGAATTGGCTTTGCTGTCAGCGCTTGC G F Y V V F D R A R K R I G F A V S A C CATGTGCACGATGAGTTCAGGACGGCGGCAGTGGAAGGTCCGTTTGTTACGGCAGACATG H V H D E F R T A A V E G P F V T A D M GAAGACTGTGGCTACAACATTCCCCAGACAGATGAGTCAACACTTATGACCATAGCCTAT EDCGYNIPQTDESTLMTIAY GTCATGGCGGCCATCTGCGCCCTCTTCATGTTGCCACTCTGCCTCATGGTATGTCAGTGG V M A A I C A L F M L P L C L M V C Q W CGCTGCCTGCGTTGCCTGCGCCACCAGCACGATGACTTTGCTGATGACATCTCCCTGCTC RCLRCLRHQHDDFADDISLL AAGTAAGGAGGCTCGTGGGCAGATGATGGAGACGCCCCTGGACCACATCTGGGTGGTTCC CTTTGGTCACATGAGTTGGAGCTATGGATGGTACCTGTGGCCAGAGCACCTCAGGACCCT

TGGCGTCATACTCAGGCTACCCGGCATGTGTCCCTGTGGTACCCTGGCAGAAAGGGCC AATCTCATTCCCTGCTGGCCAAAGTCAGCAGAAGAAGGTGAAGTTTGCCAGTTGCTTTAG TGATAGGGACTGCAGACTCAAGCCTACACTGGTACAAAGACTGCGTCTTGAGATAAACAA GAA

5.30

1	MAQALPWLLLWMGAGVLPAHGTQHGIRLPLRSGLGGAPLGLRLPRETDEE	50
1	MAPALHWLLLWVGSGMLPAQGTHLGIRLPLRSGLAGPPLGLRLPRETDEE	50
51	PEEPGRRGSFVEMVDNLRGKSGOGYYVEMTVGSPPOTLNILVDTGSSNFA	100
51	SEEPGRRGSFVEMVDNLRGKSGQGYYVEMTVGSPPQTLNILVDTGSSNFA	100
101	VGAAPHPFLHRYYOROLSSTYRDLRKGVYVPYTOGKWEGELGTDLVSIPH	150
101	VGAAPHPFLHRYYQRQLSSTYRDLRKGVYVPYTQGKWEGELGTDLVSIPH	150
151	GPNVTVRANIAAITESDKFFINGSNWEGILGLAYAEIARPDDSLEPFFDS	200
151	GPNVTVRANIAAITESDKFFINGSNWEGILGLAYAEIARPDDSLEPFFDS	200
201	LVKOTHVPNLFSLOLCGAGFPLNOSEVLASVGGSMIIGGIDHSLYTGSLW	250
201	LVKQTHIPNIFSLQLCGAGFPLNQTEALASVGGSMIIGGIDHSLYTGSLW	250
251	YTPIRREWYYEVIIVRVEINGODLKMDCKEYNYDKSIVDSGTTNLRLPKK	300
251	YTPIRREWYYEVIIVRVEINGQDLKMDCKEYNYDKSIVDSGTTNLRLPKK	300
301	VFEAAVKSIKAASSTEKFPDGFWLGEQLVCWQAGTTPWNIFPVISLYLMG	350
301	VFEAAVKSIKAASSTEKFPDGFWLGEQLVCWQAGTTPWNIFPVISLYLMG	350
351	EVTNOSFRITILPOOYLRPVEDVATSODDCYKFAISOSSTGTVMGAVIME	400
351	EVTNOSFRITILPQQYLRPVEDVATSQDDCYKFAVSQSSTGTVMGAVIME	400
401	GFYVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTLDMEDCGYNIPOT	450
401	GFYVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTADMEDCGYNIPQT	450
451	DESTLMTIAYVMAAICALFMLPLCLMVCOWRCLRCLROOHDDFADDISLL	500
451	DESTLMTIAYVMAAICALFMLPLCLMVCQWRCLRCLRHQHDDFADDISLL	500
501	K 501	
501	K 501	

1.50

FIGURE 6 (1)

ATGGCTAGCATGACTGGTGGACAGCAAATGGGTCGCGGATCCACCCAGCACGGCATCCGG M A S M T G G Q Q M G R G S T Q H G I R CTGCCCCTGCGCAGCGGCCTGGGGGGCGCCCCCTGGGGCTGCCCCGGGAGACC LPLRSGLGGAPLGLRLPRET GACGAAGAGCCCGAGGAGCCCGGCCGGAGGGGCAGCTTTGTGGAGATGGTGGACAACCTG DEEPEEPGRRGSFVEMVDNL AGGGGCAAGTCGGGGCAGGCTACTACGTGGAGATGACCGTGGGCAGCCCCCCGCAGACG R G K S G Q G Y Y V E M T V G S P P O T LNILVDTGSSNFAVGAAPHP TTCCTGCATCGCTACTACCAGAGGCAGCTGTCCAGCACATACCGGGACCTCCGGAAGGGC F L H R Y Y O R O L S S T Y R D L R K G GTGTATGTGCCCTACACCCAGGGCAAGTGGGAAGGGGAGCTGGGCACCGACCTGGTAAGC V Y V P Y T Q G K W E G E L G T D L V S ATCCCCCATGGCCCAACGTCACTGTGCGTGCCAACATTGCTGCCATCACTGAATCAGAC I P H G P N V T V R A N I A A I T E S D AAGTTCTTCATCAACGGCTCCAACTGGGAAGGCATCCTGGGGCTGGCCTATGCTGAGATT K F F I N G S N W E G I L G L A Y A E I GCCAGGCCTGACGACTCCCTGGAGCCTTTCTTTGACTCTCTGGTAAAGCAGACCCACGTT A R P D D S L E P F F D S L V K O T H V CCCAACCTCTTCTCCCTGCAGCTTTGTGGTGCTGGCTTCCCCCTCAACCAGTCTGAAGTG P. N. L. F. S. L. Q. L. C. G. A. G. F. P. L. N. Q. S. E. V. CTGGCCTCTGTCGGAGGAGCATGATCATTGGAGGTATCGACCACTCGCTGTACACAGGC LASVGGSMIIGGIDHSLYTG AGTCTCTGGTATACACCCATCCGGCGGGAGTGGTATTATGAGGTCATCATTGTGCGGGTG SLWYTPIRREWYYEVIIVRV GAGATCAATGGACAGGATCTGAAAATGGACTGCAAGGAGTACAACTATGACAAGAGCATT EINGQDLKMDCKEYNYDKSI GTGGACAGTGGCACCACCATCGTTTGCCCAAGAAAGTGTTTGAAGCTGCAGTCAAA V D S G T T N L R L P K K V F E A A V K TCCATCAAGGCAGCCTCCTCCACGGAGAAGTTCCCTGATGGTTTCTGGCTAGGAGAGCAG SIKAASSTEKFPDGFWLGEQ CTGGTGTGCTGGCAAGCAGGCACCACCCCTTGGAACATTTTCCCAGTCATCTCACTCTAC LVCWQAGTTPWNIFPVISLY CTAATGGGTGAGGTTACCAACCAGTCCTTCCGCATCACCATCCTTCCGCAGCAATACCTG LMGEVTNQSFRITILPQQYL CGGCCAGTGGAAGATGTGGCCACGTCCCAAGACGACTGTTACAAGTTTGCCATCTCACAG

5.3.3



R P V E D V A T S Q D D C Y K F A I S Q

TCATCCACGGGCACTGTTATGGGAGCTGTTATCATGGAGGGCTTCTACGTTGTCTTTGAT
S S T G T V M G A V I M E G F Y V V F D

CGGGCCCGAAAACGAATTGGCTTTGCTGTCAGCGCTTGCCATGTGCACGATGAGTTCAGG
R A R K R I G F A V S A C H V H D E F R

ACGGCAGCGGTGGAAGGCCCTTTTGTCACCTTGGACATGAACATT
T A A V E G P F V T L D M E D C G Y N I

CCACAGACAGATGAGTCATGA
P Q T D E S *

FIGURE 7 (1)

ATGGCTAGCATGACTGGTGGACAGCAAATGGGTCGCGGATCGATGACTATCTCTGACTCT M A S M T G G Q Q M G R G S M T I S D S CCGCGTGAACAGGACGGATCCACCCAGCACGGCATCCGGCTGCCCCTGCGCAGCGGCCTG PREQDGSTQHGIRLPLRSGL GGGGGCCCCCCTGGGGCTGCGGCTGCCCCGGGAGACCGAGAGCCCGAGGAGCCC G G A P L G L R L P R E T D E E P E E P GGCCGGAGGGCAGCTTTGTGGAGATGGTGGACAACCTGAGGGGCAAGTCGGGGCAGGGC G R R G S F V E M V D N L R G K S G O G TACTACGTGGAGATGACCGTGGGCAGCCCCCGCAGACGCTCAACATCCTGGTGGATACA YYVEMTVGSPPQTLNILVDT GGCAGCAGTAACTTTGCAGTGGGTGCTGCCCCCCCCCCTTCCTGCATCGCTACTACCAG G S S N F A V G A A P H P F L H R Y Y Q AGGCAGCTGTCCAGCACATACCGGGACCTCCGGAAGGGCGTGTATGTGCCCTACACCCAG R Q L S S T Y R D L R K G V Y V P Y T Q GGCAAGTGGGAAGGGGAGCTGGGCACCGACCTGGTAAGCATCCCCCATGGCCCCAACGTC G K W E G E L G T D L V S I P H G P N V ACTGTGCGTGCCAACATTGCTGCCATCACTGAATCAGACAAGTTCTTCATCAACGGCTCC TVRANIAAITESDKFFINGS AACTGGGAAGGCATCCTGGGGCTGGCCTATGCTGAGATTGCCAGGCCTGACGACTCCCTG N W E G I L G L A Y A E I A R P D D S L GAGCCTTTCTTTGACTCTCTGGTAAAGCAGACCCACGTTCCCAACCTCTTCTCCCTGCAG E P F F D S L V K Q T H V P N L F S L Q LCGAGFPLNQSEVLASVGGS ATGATCATTGGAGGTATCGACCACTCGCTGTACACAGGCAGTCTCTGGTATACACCCATC MIIGGIDHSLYTGSLWYTPI CGGCGGAGTGGTATTATGAGGTCATCATTGTGCGGGTGGAGATCAATGGACAGGATCTG R R E W Y Y E V I I V R V E I N G Q D L AAAATGGACTGCAAGGAGTACAACTATGACAAGAGCATTGTGGACAGTGGCACCAAC KMDCKEYNYDKSIVDSGTTN CTTCGTTTGCCCAAGAAAGTGTTTGAAGCTGCAGTCAAATCCATCAAGGCAGCCTCCTCC LRLPKKVFEAAVKSIKAASS ACGGAGAGTTCCCTGATGGTTTCTGGCTAGGAGAGCAGCTGGTGTGCTGGCAAGCAGGC T E K F P D G F W L G E Q L V C W O A G ACCACCCTTGGAACATTTTCCCAGTCATCTCACTCTACCTAATGGGTGAGGTTACCAAC TTPWNIFPVISLYLMGEVTN

FIGURE 7 (2)

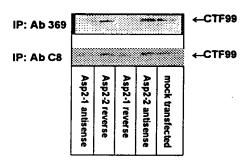
FIGURE 8 (1)

ATGACTCAGCATGGTATTCGTCTGCCACTGCGTAGCGGTCTGGGTGGTGCTCCACTGGGT M T O H G I R L P L R S G L G G A P L G L R L P R E T D E E P E E P G R R G S F GTGGAGATGGTGGACAACCTGAGGGGCAAGTCGGGGCAGGGCTACTACGTGGAGATGACC V E M V D N L R G K S G Q G Y Y V E M T GTGGGCAGCCCCCGCAGACGCTCAACATCCTGGTGGATACAGGCAGCAGTAACTTTGCA V G S P P O T L N I L V D T G S S N F A GTGGGTGCTGCCCCCACCCTTCCTGCATCGCTACTACCAGAGGCAGCTGTCCAGCACA V G A A P H P F L H R Y Y O R O L S S T TACCGGGACCTCCGGAAGGGCGTGTATGTGCCCTACACCCAGGGCAAGTGGGAAGGGGAG YRDLRKGVYVPYTQGKWEGE LGTDLVSIPHGPNVTVRANI GCTGCCATCACTGAATCAGACAAGTTCTTCATCAACGGCTCCAACTGGGAAGGCATCCTG A A I T E S D K F F I N G S N W E G I L G L A Y A E I A R P D D S L E P F F D S CTGGTAAAGCAGACCCACGTTCCCAACCTCTTCTCCCTGCAGCTTTGTGGTGCTGGCTTC LVKOTHVPNLFSLQLCGAGF P L N Q S E V L A S V G G S M I I G G I GACCACTCGCTGTACACAGGCAGTCTCTGGTATACACCCATCCGGCGGGAGTGGTATTAT D H S L Y T G S L W Y T P I R R E W Y Y GAGGTCATCATTGTGCGGGTGGAGATCAATGGACAGGATCTGAAAATGGACTGCAAGGAG E V I I V R V E I N G Q D L K M D C K E TACAACTATGACAAGAGCATTGTGGACAGTGGCACCACCACCTTCGTTTGCCCAAGAAA Y N Y D K S I V D S G T T N L R L P K K GTGTTTGAAGCTGCAGTCAAATCCATCAAGGCAGCCTCCTCCACGGAGAAGTTCCCTGAT V F E A A V K S I K A A S S T E K F P D GGTTTCTGGCTAGGAGAGCAGCTGGTGTGCTGGCAAGCAGCACCACCCCTTGGAACATT G F W L G E O L V C W O A G T T P W N I TTCCCAGTCATCTCACCTAATGGGTGAGGTTACCAACCAGTCCTTTCGCATCACC F P V I S L Y L M G E V T N Q S F R I T ATCCTTCCGCAGCAATACCTGCGGCCAGTGGAAGATGTGGCCACGTCCCAAGACGACTGT I L P Q Q Y L R P V E D V A T S Q D D C

FIGURE 8 (2)

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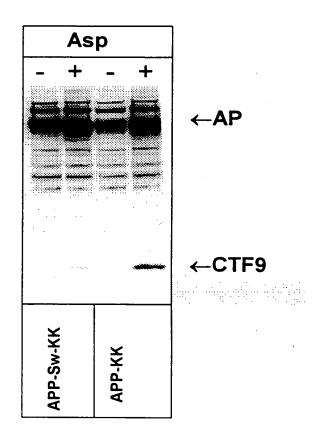
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FIGURE 10



MAOALPWLLLWMGAGVLPAHGTQHGIRLPLRSGLGGAPLGLRLPRETDEE PEEPGRRGSFVEMVDNLRGKSGQGYYVEMTVGSPPQTLNILVDTGSSNFA VGAAPHPFLHRYYQRQLSSTYRDLRKGVYVPYTQGKWEGELGTDLVSIPH GPNVTVRANIAAITESDKFFINGSNWEGILGLAYAEIARPDDSLEPFFDS LVKQTHVPNLFSLQLCGAGFPLNQSEVLASVGGSMIIGGIDHSLYTGSLW YTPIRREWYYEVIIVRVEINGQDLKMDCKEYNYDKSIVDSGTTNLRLPKK VFEAAVKSIKAASSTEKFPDGFWLGEQLVCWQAGTTPWNIFPVISLYLMG EVTNQSFRITILPQQYLRPVEDVATSQDDCYKFAISQSSTGTVMGAVIME GFYVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTLDMEDCGYNIPQT DES

MAQALPWLLLWMGAGVLPAHGTQHGIRLPLRSGLGGAPLGLRLPRETDEE PEEPGRRGSFVEMVDNLRGKSGQGYYVEMTVGSPPQTLNILVDTGSSNFA VGAAPHPFLHRYYQRQLSSTYRDLRKGVYVPYTQGKWEGELGTDLVSIPH GPNVTVRANIAAITESDKFFINGSNWEGILGLAYAEIARPDDSLEPFFDS LVKQTHVPNLFSLQLCGAGFPLNQSEVLASVGGSMIIGGIDHSLYTGSLW YTPIRREWYYEVIIVRVEINGQDLKMDCKEYNYDKSIVDSGTTNLRLPKK VFEAAVKSIKAASSTEKFPDGFWLGEQLVCWQAGTTPWNIFPVISLYLMG EVTNQSFRITILPQQYLRPVEDVATSQDDCYKFAISQSSTGTVMGAVIME GFYVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTLDMEDCGYNIPQT DESHHHHHH